

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Masaya Wajima	36856.390	5944
	EXAMI	NER
	BUDD, MARK OSBORNE	
	_ ART UNIT	PAPER NUMBER
	2834 DATE MAILED: 09/18/2002	12
		Masaya Wajima  36856.390  EXAMI BUDD, MARK  ART UNIT  2834

Please find below and/or attached an Office communication concerning this application or proceeding.

· Office Action Summary	Application No. Applicant(s) Wajima et al
	Examiner Group Art Unit 3-834
-The MAILING DATE of this communication appear	ars on the cover sheet beneath the correspondence address—
Period for Reply	2
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO THIS COMMUNICATION.	TO EXPIREMONTH(S) FROM THE MAILING DATE
from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a least than the least the least than the least the least the least than the least	1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS reply within the statutory minimum of thirty (30) days will be considered timely. t, expire SIX (6) MONTHS from the mailing date of this communication . tute, cause the application to become ABANDONED (35 U.S.C. § 133).
Status	
Responsive to communication(s) filed on $8-19$	02
☐ This action is <b>FINAL</b> .	
<ul> <li>Since this application is in condition for allowance except accordance with the practice under Ex parte Quayle, 19</li> </ul>	ot for formal matters, <b>prosecution as to the merits is closed</b> in 35 C.D. 1 1; 453 O.G. 213.
Disposition of Claims	)
Claim(s) 1-4, 7, 9, 11-15, 1	is/are pending in the application.
Of the above claim(s) is/are withdrawn from	
☐ Claim(s)	is/are allowed.
$\times$ Claim(s) $1-4$ , $7$ , $9$ , $11-15$ , $18$ $\omega$	is/are rejected.
□ Claim(s) is/are objected to.	
Undilling)	·
	are subject to restriction or election
☐ Claim(s)	are subject to restriction or election requirement.
□ Claim(s)  Application Papers	requirement.
☐ Claim(s)  Application Papers  ☐ See the attached Notice of Draftsperson's Patent Drawi	requirement. ng Review, PTO-948.
☐ Claim(s)  Application Papers  ☐ See the attached Notice of Draftsperson's Patent Drawi ☐ The proposed drawing correction, filed on	requirement.  ng Review, PTO-948 is   approved   disapproved.
☐ Claim(s)  Application Papers  ☐ See the attached Notice of Draftsperson's Patent Drawi ☐ The proposed drawing correction, filed on ☐ The drawing(s) filed on is/are objective.	requirement.  ng Review, PTO-948 is   approved   disapproved.
☐ Claim(s)  Application Papers  ☐ See the attached Notice of Draftsperson's Patent Drawi ☐ The proposed drawing correction, filed on	requirement.  ng Review, PTO-948 is   approved   disapproved.
☐ Claim(s)  Application Papers  ☐ See the attached Notice of Draftsperson's Patent Drawi ☐ The proposed drawing correction, filed on	requirement.  ng Review, PTO-948 is   approved   disapproved.
□ Claim(s)  Application Papers  □ See the attached Notice of Draftsperson's Patent Drawi □ The proposed drawing correction, filed on □ The drawing(s) filed on is/are objected to by the Examiner. □ The oath or declaration is objected to by the Examiner. □ The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. § 119 (a)-(d) □ Acknowledgment is made of a claim for foreign priority □ All □ Some* □ None of the CERTIFIED copies of □ received. □ received in Application No. (Series Code/Serial Num	requirement.  Ing Review, PTO-948.  Is approved disapproved.  Instantial a
□ Claim(s)  Application Papers  □ See the attached Notice of Draftsperson's Patent Drawi □ The proposed drawing correction, filed on	requirement.  Ing Review, PTO-948.  Is approved disapproved.  Instantial a
□ Claim(s)  Application Papers  □ See the attached Notice of Draftsperson's Patent Drawi □ The proposed drawing correction, filed on	requirement.  Ing Review, PTO-948.  Is approved disapproved.  Incident to by the Examiner.  Incident 35 U.S.C. § 11 9(a)-(d).  In the priority documents have been  International Bureau (PCT Rule 1 7.2(a)).
□ Claim(s)  Application Papers  □ See the attached Notice of Draftsperson's Patent Drawi □ The proposed drawing correction, filed on	requirement.  Ing Review, PTO-948.  Is approved disapproved.  Incident to by the Examiner.  Incident 35 U.S.C. § 11 9(a)-(d).  In the priority documents have been  International Bureau (PCT Rule 1 7.2(a)).
□ Claim(s)  Application Papers □ See the attached Notice of Draftsperson's Patent Drawi □ The proposed drawing correction, filed on	requirement.  Ing Review, PTO-948.  Is approved disapproved.  Index 35 U.S.C. § 11 9(a)-(d).  If the priority documents have been  Index bery  International Bureau (PCT Rule 1 7.2(a)).
□ Claim(s)  Application Papers □ See the attached Notice of Draftsperson's Patent Drawi □ The proposed drawing correction, filed on	requirement.  Ing Review, PTO-948.  Is approved disapproved.  Index 35 U.S.C. § 11 9(a)-(d).  If the priority documents have been  Index bery  International Bureau (PCT Rule 1 7.2(a)).

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No. 12

Application/Control Number: 09/740,913

Art Unit: 2834

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7, 9, 11-15, 18 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda, Wajima or Sugiyama in view of Tsuji or Onishi.

Kuroda, Wajima and Sugiyama teach the piezo-electric resonator except they do not use laminated substrates with integral capacitors. However, Tsuji and Onishi teach mounting piezo-electric resonators on substrates provided as laminated layers incorporating circuit elements in an integral construction. Thus, to provide an very compact self contained piezo resonator as shown by Tsuji or Onishi it would have been obvious to one of ordinary skill in the art to use laminated substrates with Kuroda, Wajima or Sugiyama. Note that once the electric circuit is designed. The physical arachatecture of the ceramic piezo elements and capacitor electrodes is dictated and thus providing that structure would have been obvious to one of ordinary skill in the art. The newly added method recitations "liquid-sintered" and "sintered at the same temperature" are not limiting in the article claimed. An article of manufacture must stand or fall on its own merits as it is blind as to how it was produced. The first and second substrates cannot 'know' whether they were sintered at different temperatures or liquid-sintered.

Application/Control Number: 09/740,913

Art Unit: 2834

M BUDD/pj

09/17/02

Page 3